CLAIMS:

1.   A medical imaging system comprising:
-        acquisition means (2) intended to acquire a volume of 3D digital data (3DV) comprising at least one object of interest (1),
-        means (4) for segmenting a region of interest comprising said object of interest

5   (1) within said volume (3DV),
-        means (3) for displaying a 2D representation (2DR) of said volume (3DV) and said segmented region of interest (RS),
-        means (5) for calculating a sub-regions map (CSR_1, CSR) within said segmented region,

10   -   correction means (6) intended to exclude sub-regions from said region of interest by means of said sub-regions map (CSR_1, CSR).

2.   A medical imaging system as claimed in Claim 1, characterized in that said means (5) for calculating a sub-regions map comprise sub-means (11) for calculating

15   watersheds intended to form a first sub-regions map (CSR_1) within the segmented region (RS).

3.   A medical imaging system as claimed in Claim 2, characterized in that said means (5) for calculating a sub-regions map comprise sub-means (10) for calculating a map

20   of distances (CD), said sub-means (11) for calculating watersheds being intended to form the first sub-regions map (CSR_1) from said map of distances (CD).

4.   A medical imaging system as claimed in Claim 2, characterized in that said means for calculating a sub-regions map (5) comprise merging sub-means (12) intended to

25   merge sub-regions of the first map (CSR_1) in order to form a second sub-regions map (CSR).

5.   A medical imaging system as claimed in Claim 1, characterized in that it comprises control means (7) enabling a user to select the sub-regions to be excluded.

6.   A medical imaging system as claimed in Claim 1, characterized in that said system is able to update said 2D representation in order to take into account the effects of the correction means.

5   7.   A medical imaging system as claimed in Claim 1, comprising labeling means (8) for labeling the sub-regions map (CSR_1, CSR) of the segmented region of interest (RS).

8.   A device for correcting a segmented region (RS), intended to be integrated in a medical imaging system intended to acquire a volume of data and to segment a region of

10   interest around an object of interest (1) within said volume, said device comprising:
-          means (5) for calculating a sub-regions map (CSR_1, CSR) within the segmented region (RS),
-          collection means (6) intended to exclude sub-regions of said region of interest (RS) by means of said sub-regions map.

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9.   A medical imaging apparatus comprising:
-          means (22) for forming a volume of digital data representing an environment including an object of interest (1),
-          a medical imaging system (20) as claimed in Claim 1.

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10.   A method of correcting a segmented region of interest comprising:
-          a step of calculating a regions map (CSR_1, CSR) within the segmented region (RS),
-          a correction step intended to exclude sub-regions of the segmented region (RS)

25   by means of the sub-regions map (CSR_1, CSR).

11.   A computer program product comprising a set of instructions which, when they are loaded into a circuit, causes the latter to implement the method as claimed in Claim 10.